



State of Utah

Department of
Natural Resources

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Division of
Oil, Gas & Mining

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Division Director

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Lieutenant Governor

July 27, 2004

TO: File

FROM: Paul Baker, Senior Reclamation Biologist

SUBJECT: Site Inspection, American Gilsonite, Bonanza Operations,
M/047/010, Uintah County, Utah

Date of Inspection: July 7, 2004
Time of Inspection: About 12:30 to 6:45 p.m.
Conditions: Partly to mostly cloudy with a few showers, 80's
Participants: Clay Taylor, American Gilsonite; Paul Baker, DOGM

Purpose of Inspection:

We wanted to look at some sites that have been reclaimed but not yet released to see if they could be released.

Observations:

The following table contains a summary of the sites we visited and our observations.

Site	Comments
R-2	Slabs placed over concrete footings (Photo 1). Natural invasion of rabbitbrush and snakeweed. Gap between two of the slabs (Photo 18), and some evidence of piping or rodent burrows (Photo 19).
R-4	Polyurethane foam used to seal the openings. No evidence of failure. Almost no signs of surface disturbance (Photo 3). A lot of cheatgrass in some areas (Photo 4), but there is natural invasion of native species (Photos 2 and 3).
H-2	Natural invasion of snakeweed and rabbitbrush but still a lot of halogeton. Surface is rocky. Shaft sealed with polyurethane foam. No evidence of failure. Photos 5 and 6.
H-10	Openings sealed with polyurethane foam with no evidence of failure. Vegetation on the access road is coming along nicely with a fair amount also

	growing at the mine site (Photo 7). Lots of winterfat at the mine site.
WH-12	Attachment A of the Reclamation Contract shows this area having equipment, but it has been removed. Did not take photos.
LE-20	Footer topped with treated lumber on which the cap was poured (Photo 8). Some burrows around the footer, but they don't appear to extend into the shaft. Vegetation is mostly weeds.
LE-19	Cap poured on existing foundation (Photo 9). Vegetation similar to LE-20.
LE-18 and LE-17	Photos 10 and 11. The disturbed areas are smaller than for LE-19.
LE-16	Did not take a picture. There is no cap yet. Vegetation in the disturbed area is mostly weeds; the area needs to be seeded.
LE-10	There are two caps (Photos 12 and 13). One is a "monopour," and the other is a footer with slabs over the top.
B-42	No cap yet. The hoist house is still at the site (Photo 14) as is some other equipment.
B-40	Another "monopour" cap (Photo 15). The site needs to be cleaned up and seeded.
I-30	The equipment is gone, but the operator may come back again (Photo 16).
I-16	This site needs to be capped and the area seeded. The equipment has been removed. Did not take a picture.
B-28	Photos 17 and 20. Equipment is gone, and the site is being reclaimed. This area was re-impacted by mining.

Conclusions and Recommendations:

Site R-2 could be released but for a few minor problems. The gap between the concrete slabs should be filled, and the operator should fill the hole shown in Photo 19 and pile dirt so water would drain away from the cap. In addition, the Division has some concerns about the slabs, but these concerns should not stop release. Chains were incorporated with the concrete for lifting the slabs, and as these chains rust, the concrete may deteriorate. I have not seen documentation that reinforcing steel was used in these slabs, but, assuming it was, it was probably not coated. For these reasons, even when the site is released, it should be periodically inspected.

I did not see any problems with the polyurethane foam used at sites R-4, H-2, and H-10. The Division originally approved use of polyurethane foam as an experimental practice and said it anticipated a minimum period of five years

before these sites could be released. It has now been about three years since these sites were reclaimed. Mr. Taylor pointed out that the Bureau of Land Management has about 10 years of experience with polyurethane foam, and he asked that the Division take this into account in its evaluation of whether these sites should be released. I told him I would do this but that it may take some time to gather adequate information to justify releasing these sites.

Looking at the pictures of B-28 (Photos 17 and 20), it is not clear whether this site has been excavated to bedrock. Before pouring concrete, the operator should be sure the footing goes on bedrock.

In general, it was my impression that the "monopour" caps appear to be less likely to fail than those where slabs are placed on footings. The operator should photo-document construction of these caps so there is no question whether the footings are on bedrock and whether the concrete is reinforced. The Division also recommends that the operator use coated steel reinforcing rods.

The operator also needs to seed these sites in the first fall after they are reclaimed. At the Harrison and Rainbow sites, there is some natural invasion of native species, but these sites should have been seeded. For this very dry environment, I suggest a seed mix that includes some aggressive non-native grasses.

After caps are placed over the shafts, the operator needs to mound soil around the cap to keep water away as much as possible. This has been done to some extent, especially on some of the newer caps.

Attachment A of the reclamation contract needs to be updated to show which sites have been released, to include new ones that have been added, to show the current status of activity, and to show current land ownership status. Site I-30 is shown on Attachment A as being State land, but the area is now managed by the Bureau of Land Management and covered under their bond. Equipment has been removed from WH-12, but Attachment A indicates the equipment is still there.

PBB:jb

Attachment: Photos

cc: Clay Taylor, American Gilsonite
Pete Sokolosky, BLM, Vernal FO

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ATTACHMENT
Photographs

M/047/010, Bonanza Operations, American Gilsonite

Inspection Dated: July 7, 2004; Report Dated: July 27, 2004

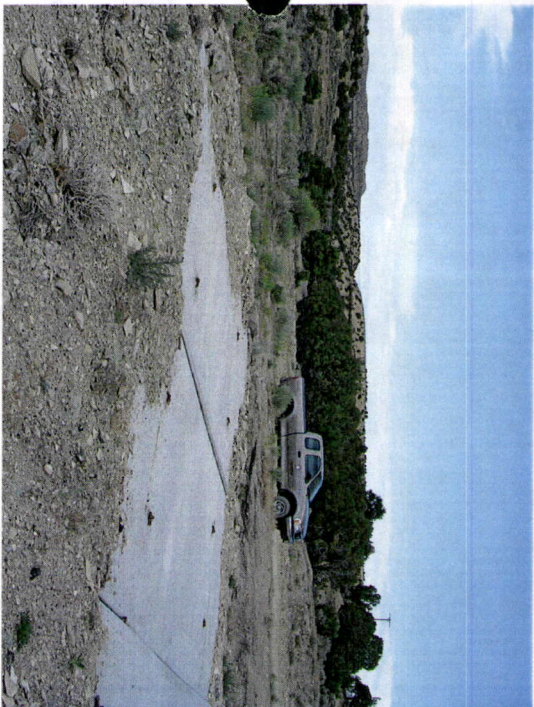


Photo 1. R-2.



Photo 2. Road into R-4.



Photo 3. R-4. The area near the bottom center of this photo was filled with polyurethane foam then covered.



Photo 4. R-4.

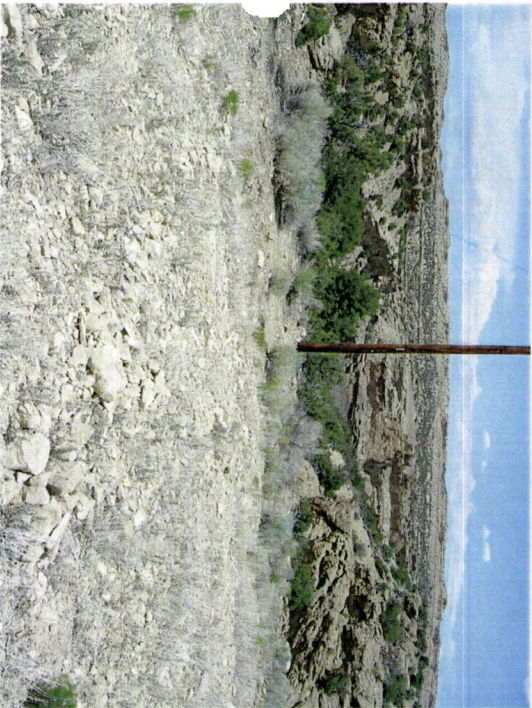


Photo 5. H-2. The ground is rocky, and there is some natural invasion.



Photo 6. H-2.



Photo 7. H-10. There is a lot of winterfat at this site.



Photo 8. LE-20. These rodent burrows do not appear to go into the shaft.



Photo 9. LE-19.



Photo 10. LE-18.



Photo 11. LE-17.



Photo 12. LE-10.



Photo 13. LE-10.



Photo 14. B-42. The hoist house. There is some other equipment still at this site.



Photo 15. B-40.



Photo 16. I-30.



Photo 17. B-28.



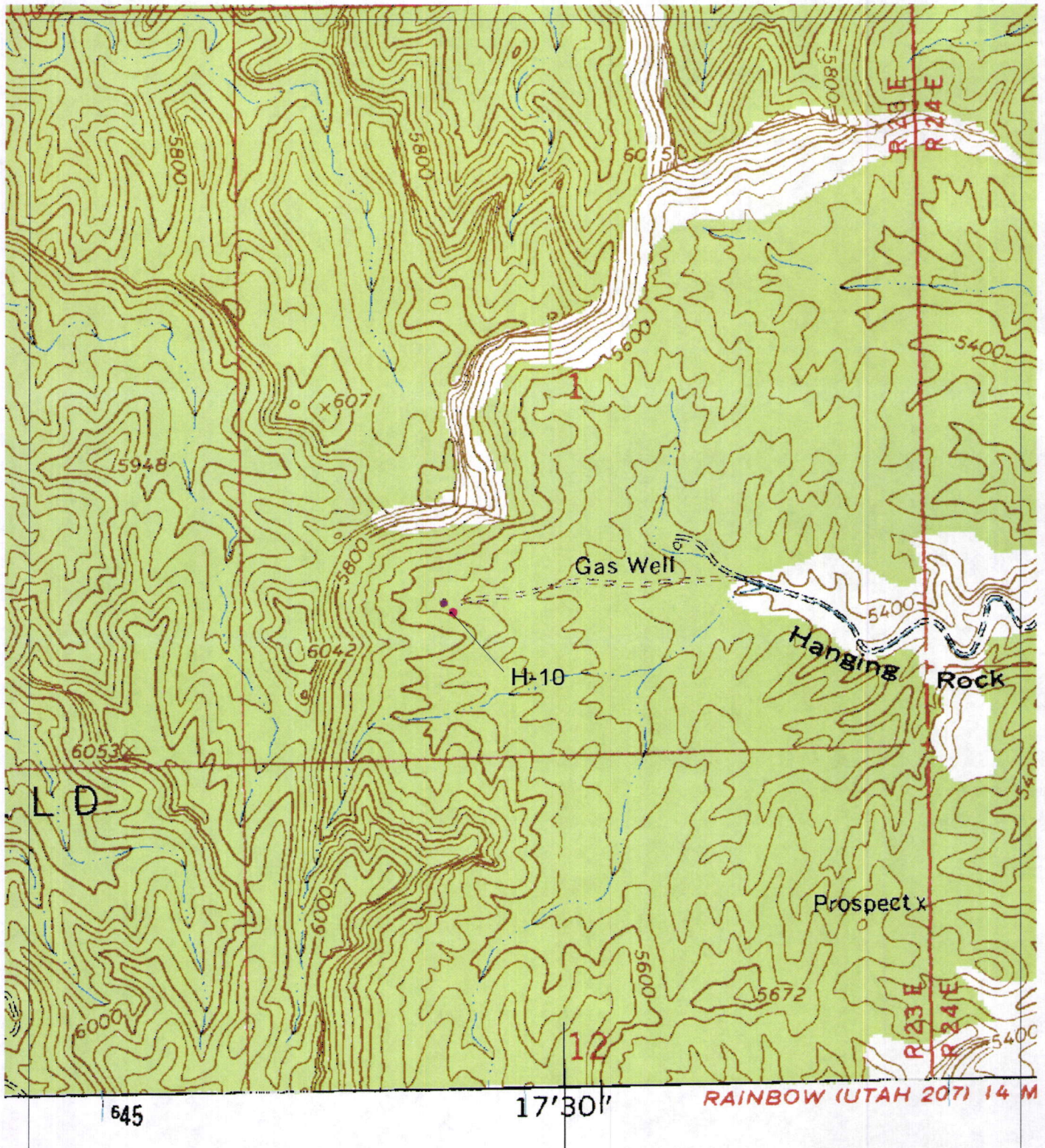
Photo 18. Gap between two of the slabs at R-2.



Photo 19. The cap at R-2.



Photo 20. Another view of B-28.



1 MILE



Dept. of Natural Resources
Division of Oil, Gas & Mining
Mineral Mines Program

Different data sources and input scales
may cause misalignment of data layers.
This product may not meet DGM
standards for accuracy and content.

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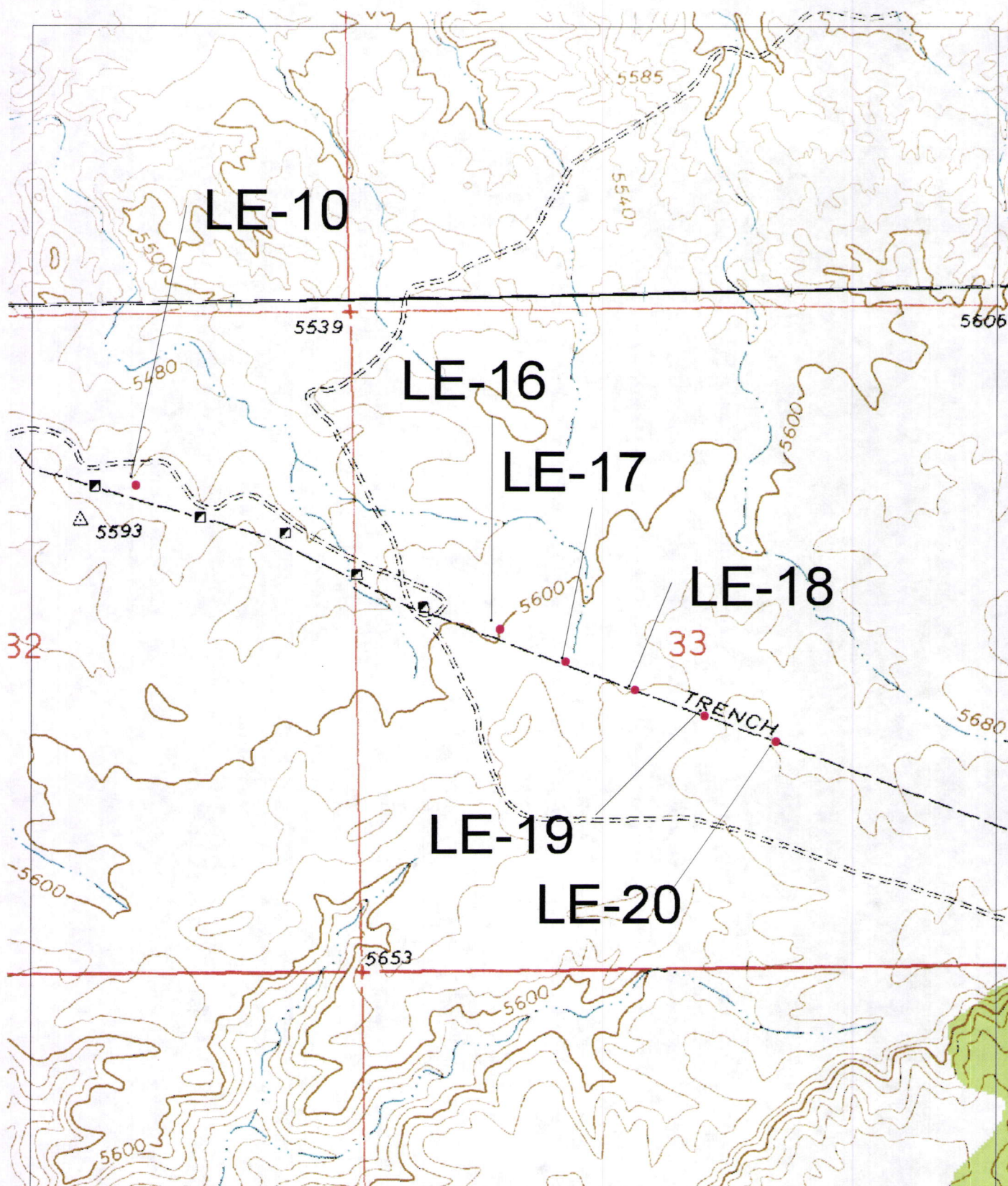
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Contour Interval: 40 feet



Mine Number: M/047/010
Mine Name: Bonanza
Township 11 S Range 23 E Section 1 SLBM

Drafted by PBB

July 2004



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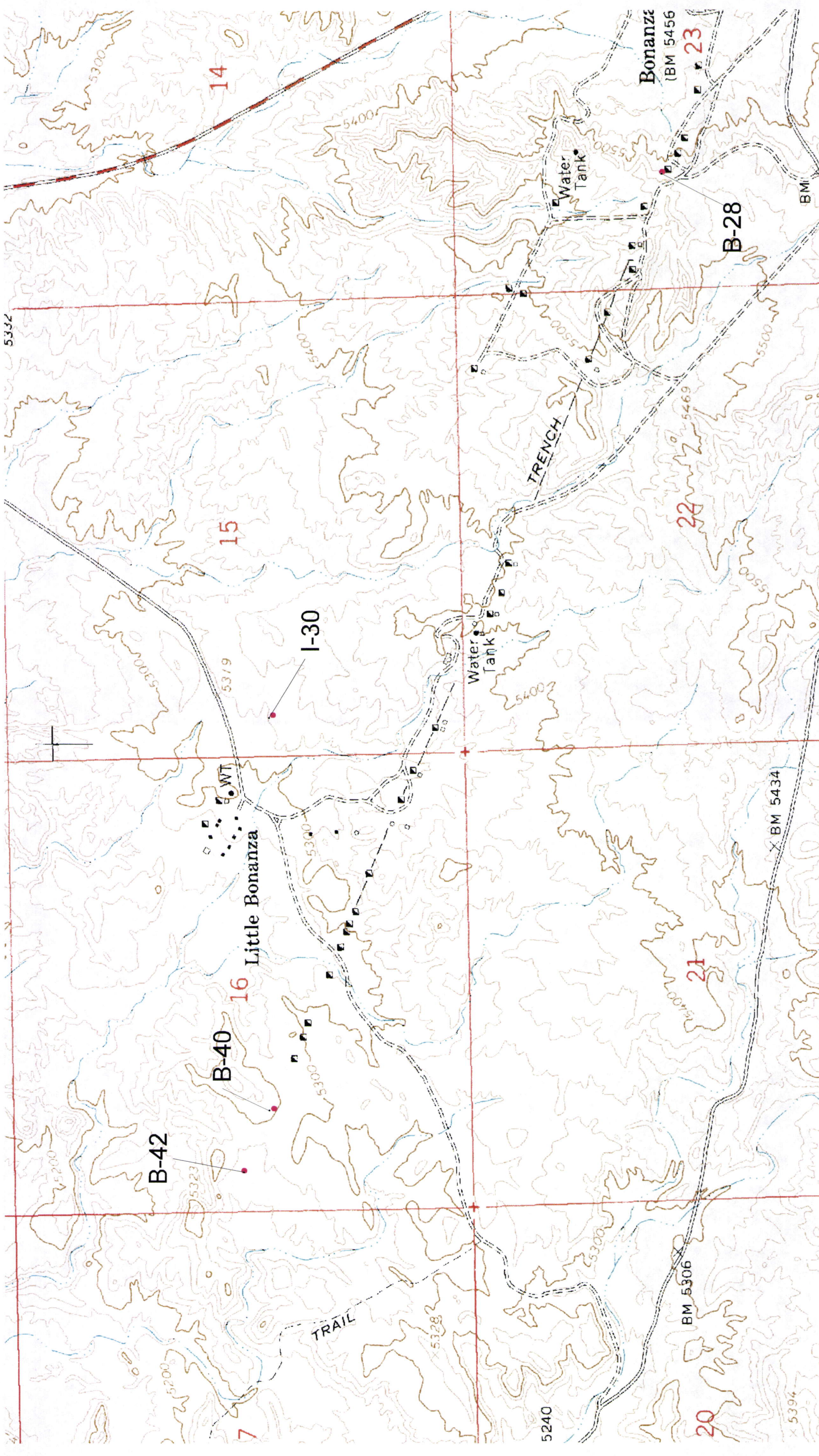
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Contour Interval: 40 feet




Mine Number: M/047/010
Mine Name: Bonanza
Township 9 S Range 24 E Sections 32 & 33 SLBM

Drafted by PBB

July 2004






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Mineral Mines Program

Mine Number: M047/010
Mine Name: Bonanza
Township 9 S Range 24 E Sections 15, 16,
and 23 SLBM

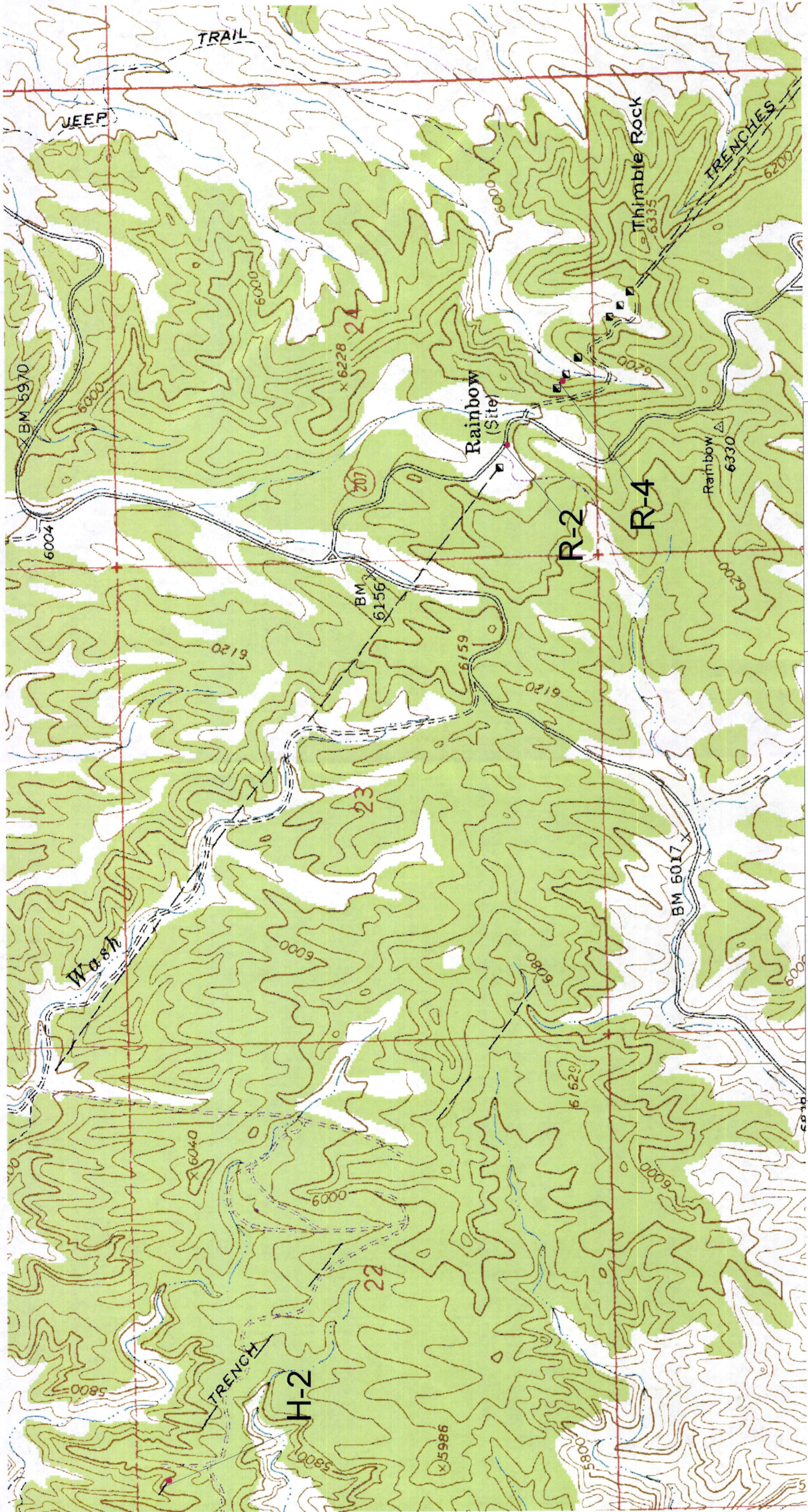
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Scale 1:30,000 (verify scale)
Contour Interval: 40 feet

Drafted by PBB

July 2004



 Dept. of Natural Resources Division of Oil, Gas & Mining Mineral Mines Program		Mine Number: M047/010 Mine Name: Bonanza Township 11 S Range 24 E Sections 22 and 24 SLBM
		Drafted by: PBB July 2004

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Scale 1:30,000 (verify scale)
Contour Interval: 40 feet

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